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EXAMINER
FLEISCHER, MARK A

ART UNIT	PAPER NUMBER
3624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/716,669	HO ET AL.
Office Action Summary	Examiner	Art Unit	
	MARK A. FLEISCHER	3624	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2009*.

2a)☒ This action is FINAL.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Status of Claims

1. This final action is in reply to the amendments filed on 16 April 2009.

2. Claim 1 has been amended.

3. Claim 10 has previously been cancelled.

4. Claims 1 – 9 and 11 – 20 are currently pending and have been examined.

Response to Amendments

5. The rejections of claims 1 – 9 under 35 U.S.C. §101 are maintained for reasons set forth below. Note however that Examiner has provided further suggestions for how to completely satisfy the requirements of the statute.

Response to Arguments

6. Applicant's arguments received on 16 April 2009 have been fully considered but they are not persuasive. Referring to the previous Office action, Examiner has cited relevant portions of the references as a means to illustrate the systems as taught by the prior art. As a means of providing further clarification as to what is taught by the references used in the first Office action, Examiner has expanded the teachings for comprehensibility while maintaining the same grounds of rejection of the claims, except as noted above in the section labeled "Status of Claims." This information is intended to assist in illuminating the teachings of the references while providing evidence that establishes further support for the rejections of the claims.

7. Applicant claims that Lindoerfer does not teach or suggest the automatic detection of the usage of parts (Remarks, p. 7) and contrasts the teachings of Lindoerfer with those of the Applicant. Applicant applies this same reasoning with respect to the other claims addressed by the references Aram and Kureshy. Examiner has amplified on the teachings of Lindoerfer however which teaches a system and method by which the cumulative consumption of materials is tracked and communicated. Assuming *arguendo* that this is not identically equal to *detecting usage of parts on a product line,* it nonetheless is an obvious variation of what is known in the art. Indeed, Applicant argues that "The entry of data into the parts information database may be manually performed, rather than by automatic detected usage of parts on a product line. The comparison of previous database information with current database information, suggested by Paragraph [0122], does not show or suggest the automatic detected usage of parts on a product line." (Remarks, p.8), but whether the method is performed manually or automatically merely highlights the obvious variation of what is known in the art---the use of data processing equipment to automatically perform that which was previously performed manually.   Notwithstanding this 'detecting', the system in Lindoerfer does contemplate such automatic processing capability as shown below. Note also the additional teachings of Aram below illustrating the obviousness of the resulting combination of Lindoerfer and Aram pertaining to a product line.

8. It is not however required that these two items be construed as equivalent, only that it is sufficiently obvious that one of ordinary skill in the art could reasonably construe a product specification to incorporate the same information as in a picking list and that one would utilize this information in the appropriate context of supply chain management, to then generate delivery information. Lindoefer [0122] in fact does show that the system "generates an alert for the appropriate manufacturer personnel, i.e., buyer/planner via an appropriate channel..." and could reasonably be construed as "generating delivery information". This view is in accord with what is recognized as the requirements to establish obviousness.

9. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones,* 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

10. The issue of obviousness is therefore not determined by what the references expressly state, but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re Delisle* 406 Fed 1326, 160 USPQ 806; *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine,* 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lalu,* 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in *In re Lamberti* et al 192 USPQ 278 (CCPA) that:

    (i) obvious does not require absolute predictability;

    (ii) non-preferred embodiments of prior art must also be considered; and

    (iii) the question is not express teaching of references but what they would suggest.

11. According to *In re Jacoby,* 135 USPQ 317 (CCPA 1962), the skilled artisan is presumed to know something more about the art than only what is disclosed in the applied references. Within *In re Bode,* 193 USPQ 12 (CCPA 1977), every reference relies to some extent on knowledge of

persons skilled in the art to complement that which is disclosed therein. In *In re Conrad* 169 USPQ 170 (CCPA), obviousness is not based on express suggestion, but what references taken collectively would suggest.

12. It is therefore respectfully submitted that explanation based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness has been adequately provided by the motivations and reasons indicated by the Examiner, *Ex pane Levengood* 28 USPQ 2d 1300 (Bd. Pat. App. & Inter., 4/22/93).

13. The arguments relative to claim 20 and the teachings of Lindoerfer and Aram may also be addressed in similar fashion.

14. Regarding claim 12, Applicant has failed to rebut Examiner's Official Notice that

- it is old and well-known as well as commonplace in the eCommerce arts to employ the use of computers, computer programs, and program media to implement such systems at the time of the invention.

Examiner notes the following discussion of Official Notice taken from the MPEP:

> To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard, 139 F.2d at 713, 60 USPQ at 241* ("[I]n the absence of any demand by appellant for the examiner to produce authority for his statement, we will not consider this contention."). A general allegation that the claims define a patentable invention without any reference to the examiner's assertion of official notice would be inadequate. If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko, 258 F.3d at 1386, 59 USPQ2d at 1697* ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was

inadequate. If the traverse was inadequate, the examiner should include
an explanation as to why it was inadequate. (MPEP § 2144.03(C))

Applicant has not "specifically point[ed] out the supposed errors in the examiner's action,
which would include stating why the noticed fact is not considered to be common knowledge or
well-known in the art." Applicant statements do not amount to a sufficient traversal because no
such arguments were offered. For these reasons, the aforementioned **Official Notice** is taken to
be admitted prior art.

Claim Rejections - 35 USC § 101

15. Claims 1 – 9 are rejected under 35 USC § 101. Based on Supreme Court precedent, and recent
Federal Circuit decisions, the Office's guidance to examiners is that a §101 process must (1) be
tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject
matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S.
175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S.
63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). An example of a method claim
that would not qualify as a statutory process would be a claim that recited purely mental steps.
Thus, to qualify as a §101 statutory process, the claim should positively recite the other statutory
class (the thing or product) to which it is tied, for example by identifying the apparatus that
accomplishes the method steps, or positively recite the subject matter that is being transformed,
for example by identifying the material that is being changed to a different state. Examiner notes
that while these claims do recite some components of the elements of another statutory class,
they are insufficient to substantively tie them to another statutory class in that no correspondence
is discernable between the various method steps and the particular components of the computer
system. Nominal recitations of structure in an otherwise ineligible method fail to make the
method a statutory process. See *Benson*, 409 U.S. at 71-72. As *Comiskey* recognized, "the mere
use of the machine to collect data necessary for application of the mental process may not make
the claim patentable subject matter." *Comiskey*, 499 F.3d at 1380 (citing In re Grams, 888 F.2d

835, 839-40 (Fed. Cir.1989)). Incidental physical limitations, such as data gathering, field of use limitations, and post-solution activity are not enough to convert an abstract idea into a statutory process. In other words, **nominal or token recitations of structure** in a method claim do not convert an otherwise ineligible claim into an eligible one. Further, it is noted that the fact that the method is computer implemented has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

16. Examiner notes that many of the limitations of independent claim 1 have been amended to satisfy the statutory requirements. Several of the limitations however would benefit from analogous amendments such as the limitations beginning with *transmitting...,* and *automatically generating...*

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claims 1 – 3 and 5 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindoerfer (US 20020069096 A1) in view of Aram (US 20020072986 A1).

Claims 1 and 11:

Note that the limitations of claim 11 although reworded in some instances and restructured, are identical in scope as claim 1 and are therefore addressed once. Lindoerfer, as shown, describes and/or discloses the following limitations (per claim 1):

- *automatically detecting usage of parts on a product line with at least one parts consumption detector* (Lindoerfer, in at least [0122]: "This electronic processing includes, [...] tracking release numbers to match line items, automatically updating the parts information database, [...] the quantity received, the date of last receipt, etc." (emphasis added) Lindoerfer [0231] states "The SRMS is configured to track the cumulative consumption of materials by one or more manufacturers. This information allows suppliers/vendors to track the consumption needs of manufacturers." (emphasis added) Also, Lindoerfer [0213] states "The usage for a selected product and/or service is graphically represented for a specified window of time..." (emphasis added) which indicates an automatic detection. Lindoerfer [0117] states "The 'Schedule Summary' screen provides the user with summary information on all parts delivery requirements to the manufacturer and tracks the status of these requirements from this point on in time until the requirement is fulfilled and completed." (emphasis added));

- *transmitting the shipping order over a public data network from the manufacturer to the logistics provider at a different geographic location than the manufacturer* (Lindoerfer, in at least [0125] states: "The manufacturer initiates the purchase order process by preparing and sending purchase orders (POs) and/or changes to POs [...] in a recognizable format (e.g., electronic flat file format) []." In this context, a 'purchase order' is equivalent to a *shipping order*. Lindoerfer further states: "Based on the most recent PO information received from the manufacturer, the SRMS sends a "New PO" [...] to the manufacturer and the interested supplier(s) [ ]." In at least [0085] Lindoerfer states: "Initial information/data (e.g., planning, parts, etc.. . .) is

provided via an established data link over a network (e.g., <u>Internet</u>) between a manufacturer [ ] and the SRMS […]" (emphasis added) where the Internet is a *public data network.* Lindoerfer states: "[T]he SRMS programs use the data in the DBMS to produce views into the supply chain process in the form of Web pages, so that a <u>manufacturer</u>, a <u>supplier</u>, and/or an administrator can use a standard browser, e.g., Internet Explorer, […], at their <u>respective locations</u> […]. The SRMS also allows a manufacturer or a supplier to <u>download</u> or <u>upload</u> files in various formats, e.g., EDI, XML, HTML, etc." thereby indicating information exchange between a *<u>manufacturer</u>* and *logistics provider* (supplier) at different locations. Lindoerfer, in at least [0143] also specifically refers to a *logistics provider:* "[The system] is configured with an on-line shipment tracking module, wherein the SRMS is linked to the tracking servers of one or more <u>logistics information service providers</u>." Finally, Lindoerfer [0105] states "The method and system are able to send alert messages, e.g., via automatically created e-mail, to both a manufacturer and a supplier, based on configurable criteria." (emphasis added) where 'send alert messages' corresponds to *transmitting…);*

- *automatically generating a picking list based on the part pull request signal and the shipping order* (Lindoerfer, in at least [0130] states: "[T]he manufacturer utilizes an "Authorization to Ship" screen to create an Authorization to Ship trigger from within the system to allow the Manufacturer to <u>utilize pull trigger</u> releases without having to implement this functionality in their MRP/ERP environment." Emphasis added. This pull trigger is further utilized in an automated fashion. See at least [0258]: "[T]he SRMS provides automation tools for automating supplier shipping functions, such as facilitating use of the SRMS to <u>generate packing lists</u> and other shipping-related documentation […]" where the 'packing list' corresponds to the *picking list); and*

- *automatically generating delivery information to the manufacturer based on the picking list* (Lindoerfer, in at least claim 4 therein describes: "The system … wherein the supply chain data includes […] <u>product specification information</u>, [and], <u>delivery</u>

information, [...]." Emphasis added. Here, 'product specification information' corresponds to the *picking list* and this 'information' is available to manufacturers, hence *to the manufacturer*. Thus, in at least [0094], Lindoerfer states: "Information [...] is entered [...] and [...] sent to the manufacturer []. Passing along the way through the various operational tables [...] before being transmitted electronically <u>to the manufacturer</u>."),

Lindoerfer does not specifically describe and/or disclose the following limitations, but Aram, as shown, does:

- *automatically triggering, by a processor, a part pull request signal as a function of the detected usage by the at least one parts consumption detector* (Note that the parts consumption detector is taught by Lindoerfer as shown above. Aram, in at least [0003]: "When the first kanban is empty it is returned to the supplier and the second kanban moves forward to take its place. At the same time an <u>electronic data interchange (EDI) signal</u> is sent to the parts supplier as notification that all the parts in the first kanban have been used." Emphasis added. The EDI signal corresponds to a *part pull request signal*. Since the second kanban moves to take the place of the first when it is empty, it follows that it is <u>automatically triggered</u> by the emptying of the first kanban.)*;*

- *automatically translating the part pull request signal to a shipping order by the processor* (Aram, in at least [0003]: "In a <u>demand pull system</u>, the manufacturer <u>automatically orders stock</u> from the supplier in anticipation of its use..." Emphasis added. Note that the 'automatic ordering' is associated with a pull system wherein a "signal is sent to the parts supplier as notification that all the parts in the first kanban have been used." Note also that Aram teaches the detection of usage on a product line that render it empty wherein Aram [0003] states "When the first kanban is empty it is returned to the supplier and the second kanban moves forward to take its place.

At the same time an electronic data interchange (EDI) signal is sent to the parts

supplier as notification that all the parts in the first kanban have been used.")

The inventions of both Lindoerfer and Aram describe a number of similarities in that both

inventions pertain to supply chain systems that utilize state-of-the-art communications

methods via the Internet and computer based inventory control systems and methods.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the

invention to combine the inventions of Lindoerfer and Aram because employing features of

both inventions increases the functionality and applicability of these supply chain

management systems.

Claims 2 and 13:

Lindoerfer/Aram describe and/or disclose the limitations in claims 1 and 11 above and 12 below.

Lindoerfer, as shown, further discloses and/or describes the following limitations.

- *the public data network is the Internet* (In at least [0085] Lindoerfer states: "Initial

    information/data (e.g., planning, parts, etc.. . .) is provided via an established data

    link over a network (e.g., <u>Internet</u>) between a manufacturer [ ] and the SRMS […]"

    (emphasis added) where the Internet is a *public data network..*)

The inventions of both Lindoerfer and Aram describe a number of similarities in that both

inventions pertain to supply chain systems that utilize state-of-the-art communications methods

via the Internet and computer based inventory control systems and methods. Therefore, it would

have been obvious to one with ordinary skill in the art at the time of the invention to combine the

inventions of Lindoerfer and Aram because employing features of both inventions increases the

functionality and applicability of these supply chain management systems.

Claim 3:

Lindoerfer/Aram describe and/or disclose the limitations in claims 1 and 2 above. Lindoerfer, as

shown, further discloses and/or describes the following limitations.

- *the shipping order and the delivery information are transmitted using extended

    markup language (XML)* (Lindoerfer, in at least [0010] states: "Embodiments […]

provide manufacturers and suppliers with the above capabilities when […] data formatting systems include XML […]." In addition, Aram, in at least [0031] states: "The computer system may communicate with the intermediary and/or customer and/or supplier(s) by any convenient communication means, but the system is particularly suited to implementation over an electronic communications network employing […] the Internet [and] may comprise […] of instruction codes for web data pages, such as […] XML [ ]."

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to incorporate the use of state-of-the-art markup languages such as XML as disclosed in both references for data interchange in a supply chain management system as this provides great flexibility and scalability that facilitate deployment of such supply chain systems.

Claim 5:

Lindoerfer/Aram describe and/or disclose the limitations in claim 1 above. Lindoerfer, as shown, further discloses and/or describes the following limitations.

- *the manufacturer comprises multiple manufacturing sites, with at least two of the sites forwarding shipping orders and receiving delivery information* (Lindoerfer, in at least [0003] states: "[T]he present invention involves the electronic management of the manufacturer/supplier relationship including <u>multiple manufacturers</u> and their many suppliers." The notion of 'multiple manufactures' implies multiple *sites*. Moreover, Lindoerfer, in at least [0230] describes the elements pertaining to *forwarding* and *receiving delivery information,* to wit: "[T]he SRMS is configured to manage and consolidate the schedules of multiple manufacturers for the benefit of individual suppliers/vendors. More often than not, a single supplier/vendor is responsible for providing products and/or services to <u>multiple manufacturers</u>. In the same way that the SRMS simplifies and manages the supply chain from the manufacturers perspective, suppliers/vendors will also benefit from the consolidation if information about the manufacturers they are servicing. The SRMS provides

searchable information and summary screens to suppliers/vendors containing data

for <u>multiple manufacturers</u>. These information and summary screens are dynamic in

that they provide the supplier/vendor with filters in order to single out desired data.

These filters allow users to narrow according to manufacturer, product and/or service,

<u>delivery dates</u>, end-product due dates, etc." Emphasis added. Note that since this

consolidated information contains *delivery information* that originated with

manufacturers (multiple) and *ipso facto* it was forwarded and received by at least two

such sites, hence, within the scope of the limitation.)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the

invention to combine the inventions of Lindoerfer and Aram as shown because use of their

inventions provides supply chain management capabilities to multiple and distribute

manufacturing and supplier locales, hence, permits greater efficiency in the management of

large-scale manufacturing systems.

Claims 6 and 15:

Lindoerfer/Aram describe and/or disclose the limitations in claim 1 above and claims 11 – 14 as

shown below. Note that the limitations of claim 15, although reworded in some instances and

restructured, are identical in scope as those of claim 6 and are therefore addressed together.

Lindoerfer, as shown, further discloses and/or describes the following limitations.

- *inputting manually created demand data and automatically triggering a part pull*

  request signal based on the manually created demand data (In at least [0128],

  Lindoerfer states: "The manufacturer can <u>tag the items manually</u> or, [...] through a

  Material Release process whereby a manufacturer determines when to allow a

  supplier to ship parts [...] by setting up <u>trigger</u> configurations." (Emphasis added.)

  Here, the phrase 'tag the items manually' is equivalent to *inputting manually created*

  demand data and 'setting up trigger configurations' is equivalent to *triggering a part*

  pull request signal as per the limitation.)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because allowing manually entered data provides users of these supply chain management systems with additional flexibility to handle unexpected situations and, therefore, make such systems more useful.

Claim 7:

Lindoerfer/Aram describe and/or disclose the limitations in claim 1 above. Lindoerfer, as shown, further discloses and/or describes the following limitations.

- *automatically generating shortage information based on delivery information generated by the logistics provider and forwarded to the manufacturer* (Lindoerfer, in at least [0016] states that his invention enables: "[…] inventory stock status, material receipt, performance metric on shipments, remittance, […] ship notice preparation and processing, […]" Note that stock status entails *shortage information* and 'material receipt' entails *delivery information* which, *ipso facto* is generated by a *logistics provider* (see also Lindoerfer at [0143] wherein he specifically refers to "logistics information service providers".)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because by providing updated and current information on the status of inventory the system enables a more efficient and cost-effective supply management system for large-scale manufacturing systems.

Claim 8:

Lindoerfer/Aram describe and/or disclose the limitations in claims 1 and 7 above. Lindoerfer, as shown, further discloses and/or describes the following limitations.

- *automatically refreshing the shortage information on a periodic basis* (Lindoerfer, in at least [0016] states: "[T]he business practices that are enabled [by the SRMS programs] and enhanced include, […] inventory stock status …" Lindoerfer further notes in at least [0110] that "Other data entered into the SRMS and stored in the DBMS includes operational tables that support displays in which the data changes

frequently …" where this implies periodic updating of information. Finally, in at least [0113] Lindoerfer states: "[U]sers of the SRMS utilize multiple Webpages in order to […] monitor supplier status […] [A]n "Inventory Summary" screen summarizes a manufacturer's <u>current inventory of products</u>, […] The inventory visibility feature provides the supplier with the data required to <u>maintain safety stock quantities</u>, […] Each plant/facility will provide <u>inventory quantity</u> […] through the SRMS so that suppliers will be able to track the physical location of products <u>they are carrying in their inventory</u>."

Lindoerfer does not specifically refer to *shortage information per se*, but Aram, as shown, does. Aram, in at least [0202] states: "The graphical representation of the distributor's stock level allows a distributor to quickly ascertain when (or whether) the stock level is predicted to <u>fall below the safety stock level</u> and when (or whether) the <u>stock level is predicted to fall below zero</u>…" where the notion of a stock level falling 'below zero' is equivalent to a *shortage*. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because supply chain systems that maintain updated information on inventory levels, including whether there are current or predicted shortages of inventory permits accurate assessment of the current status of the supply chain system and thereby enables corrective action and hence higher performance of such supply chain systems.

Claims 9 and 16:

Lindoerfer/Aram describe and/or disclose the limitations in claims 1 and 15 above. Note that the limitations of claim 16, although reworded in some instances and restructured, are identical in scope as those of claim 9 and are therefore addressed together. Lindoerfer, as shown, further discloses and/or describes the following limitations.

- *a third party interface configured to enable a third party distinct from the manufacturer to forward shipping orders to the logistics provider and receive delivery information* (Lindoerfer, in at least [0084] states: "[T]he SRMS may be hosted by a <u>third party</u> to the supply chain, e.g., a service provider, or the SRMS may be hosted by a party to

the supply chain, e.g., the manufacturer. Regardless of who the hosting entity is, the method and system of the present invention may be practiced in full under either embodiment." As noted in the rejections of claims 1 and 11 through 15, this system is also utilized to *forward shipping orders* and *delivery information*.)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because providing capabilities to third parties to use the supply chain system provides flexibility on how the system is implemented and, hence, enables potential cost savings for such supply chain systems.

Claim 10:

Lindoerfer/Aram describe and/or disclose the limitations in claims 1 and 5 above. Lindoerfer, as shown, further discloses and/or describes the following limitations.

- *setting inventory checks by at least one of manufacturing site and commodity code* (Lindoerfer, in at least [0105] states: "[The SRMS] method and system are able to send alert messages, e.g., via automatically created e-mail, to both a manufacturer and a supplier, based on <u>configurable criteria</u>." (emphasis added) where 'configurable criteria' corresponds to the *setting of inventory checks*. Lindoerfer, in at least [0256] further states: "This includes tools such as: the ability for buyer/planners and administrators to view data for all items that have a common characteristic such as for a <u>particular plant</u>, product line, <u>commodity code</u>, etc." where 'particular plant' corresponds to a *manufacturing site*.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because providing configurable alert generation methods associated with specified commodities gives users of such supply chain management systems flexibility in determining how to monitor and respond to changes in system status and thereby provide an agile and responsive supply chain system.

Claim 12:

    Lindoerfer/Aram describe and/or disclose the limitations in claim 11 above. Aram, as shown, further describes and/or discloses the following limitation.

- *the processor is coupled to computer program media, the processor being configured by a computer program stored in the computer program media* (Aram, in at least the abstract states: "The system further includes a processor coupled to the database for accessing the stored parts related data, and communication means. The system software includes …" Aram further refers to 'program media' in at least [0103]: "for example, RAM or non-volatile storage such as a hard disk. Data […] may be written to and/or read from portable storage <u>media</u>, such as floppy disk 317." Moreover, Examiner takes **as admitted prior art** that it is old and well-known as well as commonplace in the eCommerce arts to employ the use of computers, computer programs, and program media to implement such systems.)

    Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because use of state-of-the-art computer systems and components allows the methods of their inventions to be realized.

Claim 14:

    Lindoerfer/Aram describe and/or disclose the limitations in claims 11 – 13 above. Aram, as shown, further describes and/or discloses the following limitation.

- *…a plurality of manufacturing facilities are coupled together by an intranet, with at least two of the manufacturing facilities each having at least one parts consumption detector coupled to the processor through the intranet* (Aram, in at least [0031] states: "The computer system may communicate with the intermediary and/or customer and/or supplier(s) by any convenient communication means, but the system is particularly suited to implementation over an electronic communications network employing an internet protocol, such as an <u>intranet</u> […].")

Aram does not specifically refer to a *plurality of manufacturing facilities,* or the *consumption detector,* but Lindoerfer, as shown, does. Lindoerfer, in at least [0003] states: "More particularly, the present invention involves the electronic management of the manufacturer/supplier relationship including <u>multiple manufacturers</u> and their many suppliers." Lindoerfer, in at least [0231] refers to the equivalent of a *consumption detector,* to wit: "The SRMS is configured to <u>track</u> the cumulative <u>consumption of materials</u> by one or more manufacturers. This information allows suppliers/vendors to track the consumption needs of manufacturers."

The inventions of both Lindoerfer and Aram describe a number of similarities in that both inventions pertain to supply chain systems that utilize state-of-the-art communications methods via the Internet and computer based inventory control systems and methods. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because employing features of both inventions increases the functionality and applicability of these supply chain management systems.

Claim 17:

Lindoerfer/Aram describe and/or disclose the limitations in claims 11 above. Lindoerfer, as shown, further describes and/or discloses the following limitation.

- *the logistics provider coupled to the public data network and having a warehouse management system configured to receive the shipping order and automatically generate a picking list based on the shipping order* (Lindoerfer, in at least [0085] states: "[T]he SRMS is hosted by a third party service. Initial information/data (e.g., planning, parts, etc.. . .) is provided via an established data link over a network (e.g., Internet)...". Examiner takes **Official Notice** that the Internet is a *public data network.* In at least [0014], Lindoerfer states: "Requirements data is received from a manufacturer ..." where 'requirements data' corresponds to a shipping order. Lindoerfer, in at least [0258] further states: "[T]he SRMS provides automation tools for automating supplier shipping functions, such as facilitating use of the SRMS to

generate packing lists and other shipping-related documentation […]." (emphasis added) where 'generate packing lists' corresponds to the limitation *generate a picking list.* Finally, in at least [0120] Lindoerfer refers to "stock inventory maintained by the supplier at their facilities." (emphasis added) and thus corresponds to a *warehouse* wherein the SRMS *management system* is utilized.)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because connecting logistics providers to public data networks and allowing information transmitted over such networks to automatically generate a picking list enables a faster and more efficient and cost-effective supply chain management system.

Claim 18:

Lindoerfer/Aram describe and/or disclose the limitations in claims 11 and 17 above. Lindoerfer, as shown, further describes and/or discloses the following limitation.

- *the warehouse management system is further configured to generate the delivery information based on the generated picking list* (See the rejection of claim 17 regarding the *warehouse management system.* Lindoerfer, in at least [0117] states: "A manufacturer's material delivery requirements [… are] summarized on a "Schedule Summary" […]. These requirements may be derived from manufacturer data from a variety of sources including, but not limited to: planning schedule documents, purchase order documents, material release documents, Vendor Managed Inventory data and other data sources and data structures. The "Schedule Summary" screen provides the user with summary information on all parts delivery requirements to the manufacturer and tracks the status of these requirements from this point on in time until the requirement is fulfilled and completed. For example, the "Schedule Summary" displays the commit, shipment, receipt and payment information […]." where the phrase 'derived from manufacturer data' in conjunction

with the other emphasized text corresponds to *delivery information based on the generated picking list.*)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because configuring a warehouse management system to automatically generate delivery information based on a picking list enables a faster and more efficient and cost-effective supply chain management system.

Claim 19:

Lindoerfer/Aram describe and/or disclose the limitations in claims 11, 17 and 18 above. Lindoerfer, as shown, further describes and/or discloses the following limitation.

- *the warehouse management system is further configured to generate shortage information and provide the shortage information to the processor via the public data network on a periodic basis* (Lindoerfer, in at least [0113] states: "The inventory visibility feature provides the supplier with the data required to maintain safety stock quantities [...]. Each plant/facility will provide inventory quantity and location information through the SRMS so that suppliers will be able to track the physical location of products they are carrying in their inventory." Here, the 'inventory visibility feature' provides data pertaining to 'safety stock', hence corresponds to *shortage information*. Further, this information is manipulated 'through the SRMS' which corresponds to providing this information *via the public data network* (see the rejection of claim 11). Finally, the capability 'to track' this information *ipso facto* indicates such information is provided to the network on a *periodic basis.*)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because configuring a warehouse management system to provide shortage information (inventory management capability) to a processor connected to a public network enables a faster and more efficient and cost-effective supply chain management system as it allows data to be provided to those users that require it.

19. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindoerfer (US 20020069096 A1) in view of Aram (US 20020072986 A1).

Claim 20:

Lindoerfer, as shown, describes and/or discloses the following limitations:

- *a consumable parts usage detection system that*
  - *automatically detects the usage of consumable parts and* (See the rejection of the first limitation of claim 1);
  - *generates usage signals that indicate a quantity of consumable parts used at the manufacturing facility* (Lindoerfer, in at least [0231] states: "The SRMS is configured to <u>track the cumulative consumption of materials by one or more manufacturers</u>." Emphasis added. The capability to track the 'consumption of materials' implies the generation of *usage signals*)*; and*

Lindoerfer does not specifically describe and/or disclose the following limitations, but Aram, as shown, does:

- *means responsive to the usage signals for*
  - *automatically interfacing the manufacturing facility with the logistics provider over a public data network to cause the logistics provider to replenish the consumable parts at the manufacturing facility* (Aram, in at least [0003] describes the following: "In a demand pull system, the manufacturer <u>automatically orders</u> stock from the supplier in anticipation of its use ..." (emphasis added)
  - *and to provide delivery and shortage information to the manufacturing facility over the public data network* (Aram, in at least [0002] states: "The invention is particularly concerned with the electronic management of procurement using a communications network such as the Internet." Thus corresponding to data sent over *the public data network*. In at least [0185] Aram further states: "<u>Delivery information</u> [...] Corresponding information can also be delivered to the customer by e-mail [...]." Note that since the 'delivery information' can be sent by 'e-mail',

it corresponds to the part of the limitation that it sent over the *public data network*. Finally, the communication of *shortage information* is also described in at least [0140]: "However, if the stock is less than the minimum safety level, both the distributor and supplier are e-mailed with notification of the supplier's low stock level of that part." Where the insufficiency of safety stock corresponds to *shortage information* which is 'e-mailed', hence *provided* over a *public data network*.)

The inventions of both Lindoerfer and Aram describe a number of similarities in that both inventions pertain to supply chain systems that utilize state-of-the-art communications methods via the Internet and computer based inventory control systems and methods. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram because employing features of both inventions increases the functionality and applicability of these supply chain management systems.

20. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindoerfer/Aram as applied to claims 1, 2, and 3 above, and further in view of Kureshy (US 20020152268 A1).

Claim 4:

Lindoerfer/Aram describe and/or disclose the limitations in claims 1–3 above. Lindoerfer/Aram do not specifically disclose the following limitation, but Kureshy, as shown, does.

- *the forwarding of the shipping order from the manufacturer to the logistics provider is a peer-to-peer transmission* (Kureshy, in at least [0046] states: "Although the remote client application [] and the network application [] are illustrated in a server/client relationship, one skilled in the relevant art will appreciate that the two applications may also be configured in a <u>peer-to-peer</u> relationship." Emphasis added.)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the inventions of Lindoerfer and Aram with that of Kureshy because all of these inventions entail some form of communications over the Internet and the use of peer-to-

peer type networks increases the capacity, fault tolerance and robustness of peer-to-peer networks and, hence, would do so in supply chain systems.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Mark A. Fleischer** whose telephone number is **571.270.3925.** The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Bradley Bayat** whose telephone number is **571.272.6704** may be contacted.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair <http://pair-direct.uspto.gov >. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

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or faxed to **571-273-8300**.

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Mark A. Fleischer
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Examiner, Art Unit 3624   3 August 2009

/Bradley B Bayat/

Supervisory Patent Examiner, Art Unit 3624